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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/642,890	08/18/2003	Neal R. Caliendo JR.	RPS920030090US1 3348		
	7590 04/16/2007 W GROUP LLP		EXAMINER		
PO BOX 51418			INGBERG, TODD D		
PALO ALTO,	CA 94303		ART UNIT PAPER NUMBER 2193		
			MAIL DATE	DELIVERY MODE	
			04/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
Intonvious Summans	10/642,890	CALIENDO ET AL.						
Interview Summary	Examiner	Art Unit						
	Todd Ingberg	2193						
All participants (applicant, applicant's representative, PTO	personnel):							
(1) <u>Todd Ingberg</u> .	(3) Rod Waltermann & Arnold Weksler.							
(2) <u>Joseph A. Sawyer, Jr. (30,801)</u> .	A. Sawyer, Jr. (30,801). (4) Carlos Munoz-Bustamante (51,349).							
Date of Interview: <u>11 April 2007</u> .	,							
Type: a)⊠ Telephonic b)□ Video Conference c)□ Personal [copy given to: 1)□ applicant 2	2)∏ applicant's representative	e]						
Exhibit shown or demonstration conducted: d)⊠ Yes If Yes, brief description: <u>Proposed Amendment</u> .	e)⊡ No.							
Claim(s) discussed: <u>1, 19, 38, 39, 55 - 60</u> .	·							
Identification of prior art discussed:								
Agreement with respect to the claims f)  was reached. g	)∏ was not reached. h)⊠ N	I/A.						
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: <u>See attachment</u> .								
(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)								
THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.								

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

#### **Summary of Record of Interview Requirements**

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

# Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by
  attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does
  not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,

(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)

- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### **Examiner to Check for Accuracy**

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Application/Control Number: 10/642,890

Art Unit: 2193

# Interview Summary 10/642,890

The claimed invention is directed toward the building of an image on a source computer which can then be copied to a destination computer. The computers share many common system characteristics. The invention build the image of the source computer by analyzing the uninstall program on the computer on the source computer to determine the installed products and their location and registry file information. This information is used to reconstruct an image. The reconstructed image can be copied to destination computer(s).

## Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Todd Ingberg Primary Examiner Art Unit 2193

PTOL-413A (09-08)
Approved for use through 03/31/2007. OMB 0851-0031
U.S. Patent and Trademerk Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form									
Application No.: 10/642,890 First Named Applicant; Neal R. Caliendo, Jr.									
Examiner: Todd D. Ingberg		Art Unit: 2193	Status of Application: Pending / Final						
Tentative Participant	s:				,				
(1) Examiner Todd D. Ingberg		(2) Joseph A. Sawyer, Jr.							
(3) Charlie Bustamante		(4) Rod Walterman							
Proposed Date of Inte	erview: Friday, A	April 6, 2007	Proposed T	_(AM/PM)					
Type of Interview Requested: (1) [x] Telephonic (2) [ ] Personal (3) [ ] Video Conference									
Exhibit To Be Shown	or Demonstrat	ted: [x] YES	[ ] NO	•					
If yes, provide brief d	escription; Prio	r Art / Rejections		· · · · · · · · · · · · · · · · · · ·	·				
Issues To Be Discussed									
Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed				
(1) Rejections	1-38	Dawson R. Engler	[]	[]	[ ]				
(2)			[]	[]	[]				
(3)			.[]	[]	[]				
(4)	Attached		[]	[]	[]				
Brief Description of Arguments to be Presented: Claims 1-12, 14-30, and 32-38 and newly presented 39-60.									
			,						
An interview was conducted on the above-identified application on  NOTE: _This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).  This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.									
/JOSEPH A. SAWYER, JR./ Applicant/Applicant's Representative Signature Examiner/SPE Signature  Joseph A. Sawyer, Jr.  Typed/Printed Name of Applicant or Representative									
30,801  Registration Number, if applicable									

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time year require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2. American LegalNet, Inc.

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Date: March , 2007

Neal R. Caliendo Jr.

Confirmation No.: 3348

Serial No.: 10/642,890

Group Art Unit: 2193

Filed: 08/18/2003

Examiner: Ingberg, Todd D.

For: METHOD FOR PROVIDING AN IMAGE OF SOFTWARE

INSTALLED ON A COMPUTER SYSTEM

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# DRAFT AMENDMENT

Sir:

In response to the Final Office Action dated March 3, 2007, please amend the above-identified application in the following manner:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 12 of this paper.

## Amendments to the Claims

This listing of claims will replace all prior version, and listings, of claims in the application.

# **Listing of Claims:**

- (Currently amended) A method for providing an image of software installed on a computer system, the method comprising the steps of:
  - (a) deconstructing the image into at least one portion;
- (b) creating at least one module from the at least one portion of the image <u>utilizing</u> information, wherein the information is selected from a group consisting of install information and uninstall information; and
- (e) formatting the at least one module for use in a new image or at least a portion of a new image.
- 2. (Currently amended) The method of claim 1 wherein the deconstructing step (a) the image further comprises the steps of:
  - (a2) scanning the image; and
  - (a3) identifying at least one portion of the image to be modularized.
- 3. (Currently amended) The method of claim 2 wherein the identifying step (a3) at least one portion comprises the steps of:
  - (a3iii) providing a list of portions of the image to be modularized; and
  - (a3iii) selecting at least one portion of the image to be modularized.

- 4. (Original) The method of claim 1 wherein the at least one portion of the image represents at least one software program.
- 5. (Original) The method of claim 4 wherein the at least one software program is hardware independent.
- 6. (Original) The method of claim 1 wherein the at least one portion of the image represents a plurality of software programs.
- 7. (Original) The method of claim 6 wherein the plurality of software programs comprises a combination of hardware-independent and hardware-dependent software programs.
  - 8. (Cancelled)
- 9. (Currently amended) The method of claim 1 wherein the creating step (b) at least one module further comprises the steps of:
  - (b2) extracting the at least one portion of the image; and
  - (b3) generating the at least one module from the extracted portion of the image.
- 10. (Original) The method of claim 9 wherein the extracted portion of the image comprises uninstall scripts.
- 11. (Currently amended) The method of claim 10 wherein the generating step (b3) at least one module comprises the steps of:

- (b3ii) scanning the uninstall scripts; and
- (b3iii) generating install scripts from the uninstall scripts.
- 12. (Currently amended) The method of claim 11 wherein the generating step (b3iii) install scripts comprises the steps of:
  - (b3iiiA) reversing the order of the uninstall scripts;
  - (b3iiiB) determining uninstall scripts from the uninstall scripts; and
  - (b3iiiC) configuring a portion of the install scripts.
  - 13. (Canceled)
- 14. (Previously presented) The method of claim 1 wherein the software program is hardware-independent application software.
- 15. (Original) The method of claim 14 wherein the hardware-independent application software is a hardware-independent imaging tool.
  - 16. (Original) The method of claim 1 wherein the module is hardware independent.
- 17. (Currently amended) The method of claim 1 wherein the creating step (b) at least one module further comprises the step of (b2) creating a plurality of modules from the at least one portion of the image.
  - 18. (Original) The method of claim 17 wherein the plurality of modules comprises

a combination of hardware-independent and hardware-dependent modules.

- 19. (Currently amended) A computer-readable storage medium including a computer program for providing an image of software installed on a computer system, comprising instructions for:
  - (a) deconstructing the image into at least one portion;
- (b) creating at least one module from the at least one portion of the image <u>utilizing</u> information, wherein the information is selected from a group consisting of install information; and
- (e) formatting the at least one module for use in a new image or at least a portion of a new image.
- 20. (Currently amended) The medium of claim 19 wherein the deconstructing instruction (a) the image further comprises the instructions of:
  - (a2) scanning the image; and
  - (a3) identifying the at least one portion of the image to be modularized.
- 21. (Currently amended) The medium of claim 20 wherein the identifying instruction (a3) at least one portion comprises the instructions of:
  - (a3ii) providing a list of portions of the image to be modularized; and (a3iii) selecting the at least one portion of the image to be modularized.
- 22. (Original) The medium of claim 19 wherein the at least one portion of the image represents at least one software program.

- 23. (Original) The medium of claim 22 wherein the at least one software program is hardware independent.
- 24. (Previously presented) The medium of claim 19 wherein the at least one portion of the image represents a plurality of software programs.
- 25. (Previously presented) The medium of claim 24 wherein the plurality of software programs comprises a combination of hardware-independent and hardware-dependent software programs.
  - 26. (Cancelled)
- 27. (Currently amended) The medium of claim 19 wherein the creating instruction (b) at least one module further comprises the instructions of:
  - (b2) extracting the at least one portion of the image; and
  - (b3) generating at least one module from the extracted portion of the image.
- 28. (Original) The medium of claim 27 wherein the extracted portion of the image comprises uninstall scripts.
- 29. (Currently amended) The medium of claim 28 wherein the generating instruction (b3) at least one module comprises the instructions of:
  - (b3ii) scanning the uninstall scripts; and

(b3iii) generating install scripts from the uninstall scripts.

30. (Currently amended) The medium of claim 29 wherein the generating instruction (b3iii) install scripts comprises the instructions of:

(b3iiiA) reversing the order of the uninstall scripts;

(b3iiiB) determining install scripts from the uninstall scripts; and

(b3iiiC) configuring a portion of the install scripts.

- 31. (Cancelled)
- 32. (Previously presented) The medium of claim 19 wherein the software program is a hardware-independent application software.
- 33. (Original) The medium of claim 32 wherein the hardware-independent application software is a hardware-independent imaging tool.
- 34. (Original) The medium of claim 19 wherein the module is hardware independent.
- 35. (Currently amended) The medium of claim 19 wherein the creating instruction (b) at least one module further comprises the instruction of (b2) creating a plurality of modules from the at least one portion of the image.
  - 36. (Previously presented) The medium of claim 35 wherein the plurality of modules

comprises a combination of hardware-independent and hardware-dependent modules.

- 37. (Cancelled)
- 38. (Currently amended) A computer-readable storage medium including a compute program for providing an image of software installed on a computer system, comprising instructions for:
  - (a) deconstructing the image into at least one portion;
- (b) creating the at least one module from the at least one portion of the image <u>utilizing</u> <u>uninstall code</u>; and
  - (e) formatting the at least one module for use in at least a portion of a new image.
  - 39. (New) A system comprising:
  - a storage medium; and

a processing system coupled to the storage medium, the processing system including a mechanism for deconstructing an image into at least one portion; creating at least one module from at least one portion of the image utilizing information wherein the information is selected from a group consisting of install information and uninstall information; and

formatting the at least one module for use in a new image or at least a portion of a new image.

40. (New) The system of claim 39 wherein the deconstructing the image comprises: scanning the image; and identifying at least one portion of the image to be modularized.

41. (New) The system of claim 40 wherein the identifying at least one portion comprises:

providing a list of portions of the image to be modularized; and selecting at least one portion of the image to be modularized.

- 42. (New) The system of claim 39 wherein the at least one portion of the image represents at least one software program.
- 43. (New) The system of claim 42 wherein the at least one software program is hardware independent.
- 44. (New) The system of claim 39 wherein the at least one portion of the image represents a plurality of software programs.
- 45. (New) The system of claim 44 wherein the plurality of software programs comprises a combination of hardware-independent and hardware-dependent software programs.
- 46. (New) The system of claim 39 wherein the creating at least one module further comprises:

extracting the at least one portion of the image; and generating the at least one module from the extracted portion of the image.

47. (New) The system of claim 46 wherein the extracted portion of the image

comprises uninstall scripts.

48. (New) The system of claim 47 wherein the generating at least one module comprises:

scanning the uninstall scripts; and generating install scripts from the uninstall scripts.

- 49. (New) The system of claim 48 wherein the generating install scripts comprises: reversing the order of the uninstall scripts; determining the uninstall scripts from the uninstall scripts; and configuring a portion of the install scripts.
- 50. (New) The system of claim 39 wherein the software program is hardware-independent application software.
- 51. (New) The system of claim 50 wherein the hardware-independent application software is a hardware-independent imaging tool.
  - 52. (New) The system of claim 39 wherein the module is hardware independent.
- 53. (New) The system of claim 39 wherein the creating at least one module further comprises creating a plurality of modules from the at least one portion of the image.

- 54. (New) The system of claim 54 wherein the plurality of modules comprises a combination of hardware-independent and hardware-dependent modules.
  - 55. (New) A system comprising:
  - a storage medium; and
- a processing system coupled to the storage medium, the processing system including a mechanism for deconstructing an image into at least one portion; creating at least one module from the at least one portion of the image utilizing uninstall code; and formatting the at least one module for use in a new image or at least a portion of a new image.
- 56. (New) The method of claim 1 wherein the at least one portion of the image comprises an operating system and code, wherein the code is selected from a group consisting of a set of drivers, a set of utilities and application software.
- 57. (New) The medium of claim 19 wherein the at least one portion of the image comprises an operating system and code, wherein the code is selected from a group consisting of a set of drivers, a set of utilities and application software.
- 58. (New) The medium of claim 38 wherein the at least one portion of the image comprises an operating system and code, wherein the code is selected from a group consisting of a set of drivers, a set of utilities and application software.

- 59. (New) The system of claim 39 wherein the at least one portion of the image comprises an operating system and code, wherein the code is selected from a group consisting of a set of drivers, a set of utilities and application software.
- 60. (New) The system of claim 55 wherein the at least one portion of the image comprises an operating system and code, wherein the code is selected from a group consisting of a set of drivers, a set of utilities and application software.

#### **REMARKS**

Claims 1-12, 14-30, and 32-38 are pending in the present application. Claims 1-3, 9, 11-12, 17, 19-21, 27, 29-30, 35 and 37-38 have been amended and no new matter has been added. Claims 8, 26, and 37 have been cancelled. Claims 13 and 31 have previously been cancelled. New claims 39-60 have been added. Accordingly, claims 1-7, 9-12, 14-25, 27, 30, 32-36 and 38-60 are now pending in the present application. Applicants find support for the claims generally throughout the specification, specifically on pages 5-14 and in Figures 1-5.

#### **Present Invention**

An improved process for providing an image of software installed on a computer system is disclosed. The process includes the steps of deconstructing an existing image and creating one or more modules from all or part of the image utilizing either install information or uninstall information. To deconstruct the image, the image is scanned to identify at least one portion of the image to be modularized. At least one portion of the image is then extracted, and at least one module is generated from that portion of the image. The module can then be formatted for use in a new image or part of a new image to be used with a particular software program, such as with a hardware-independent imaging tool or with other hardware-independent application software. An advantage of making an image modular is that it allows hardware-independent software programs (e.g., operating system, commonly used application software) to be abstracted or separated from hardware-dependent software programs (e.g., device drivers, hardware-dependent software). Modules can be added or removed from an image as needed, or can be combined to create new modular-based images.

#### Claim Rejections - 35 USC § 102

The Examiner states,

Claims 1-38 are rejected under 35 U.S.C. 102(b) as being anticipated by DERIVE: A Tool That Automatically Reverse-Engineers Instruction Encodings, Dawson R. Engier et al., ACM, 2000, pages 12-22.

DERIVE anticipates a method for providing an image of software installed on a computer system, the method comprising the steps of:

- (a) deconstructing the image into at least one portion (Derive, Abstract, page 1, Reverse Engineering installed software); and
- (b) creating at least one module from the at least one portion of the image (Derive, Conclusion, page 19, instruction encoding and page 22, encoding structure, Figure 5 emitter specification).
- (c) formatting at least one module for use in a new image or at least a portion of a new image.

Examiner note: When taking the reference as a whole, please, look on page 14 Figure 1 at the information flow for a detailed view. DERIVE solver produces encoding description and the emitter generator feeds the instruction emitter, the presence of JIT is the Just in time Compiler which produces the new image in cooperation with the instruction emitter. Also, please look at the bottom of page 18 one of the last sentences on Linkers "...for only a few specific type of machine-dependent information, derived by feeding appropriate inputs to existing assemblies and linkers." The Linker by definition formats input into images. That is the role of the linker.

Applicants respectfully submit that the independent claims 1, 17 and 37-39 are not anticipated by the DERIVE reference. For ease of review, claim 1 is reproduced below:

1. (Currently amended) A method for providing an image of software installed on a computer system, the method comprising:

deconstructing the image into at least one portion, wherein the at least one portion of the image comprises an operating system and code, wherein the code is selected from a group consisting of a set of drivers, a set of utilities and application software;

creating at least one module from the at least one portion of the image utilizing information, wherein the information is selected from a group consisting of install information and uninstall information; and

formatting the at least one module for use in a new image or at least a portion of a new image.

Applicants submit that DERIVE discloses a method of reverse-engineering instruction encodings from pre-existing software (the system assembler) and uses the information extracted to construct dynamic linking libraries, object-level sandboxers, executable optimizers, and

linkers. Accordingly, DERIVE discloses reverse engineering instructions from software. In contrast, the present invention comprises deconstructing an image into at least one portion. As described in the specification, page 6, lines 11-13, an image comprises an operating system, at least one of a set of drivers, a set of utilities and/or application software. A portion of an image that is deconstructed from an image is clearly different than the reverse engineering of instructions as disclosed in DERIVE. In fact, DERIVE may be used as a portion of the recited invention by reverse engineering specific instructions but it is not capable of deconstructing an image into at least one portion.

In addition, a system in accordance with DERIVE reference copies a program from one instruction set to another instruction set. In contrast, in the present invention a module is created utilizing either install information or uninstall information from the at least one portion.

Therefore, the creating of a module includes performing tasks required to install a new image on another computer system. For example, as stated in the specification at page 9, line 16-page 10, line 16,

"There can be one or more portions and one or more modules generated from each portion depending on the specific application. In the preferred embodiment, the module is generated using uninstall code, also referred to as uninstall "scripts," which are commonly used to remove an installed software program. To generate the module from the uninstall scripts, the uninstall scripts are first scanned/searched and analyzed in reversed order to determine the actions that have taken place to install the software. The uninstall scripts are typically stored in an uninstall file, in a registry, or in the OS software and accessed from a dynamic-link library (DLL). The uninstall scripts typically include data such as application specific actions, decrement reference counts, shared DLL files, removed registry keys, pointers, links, files copied, and/or moved, etc.

The module can then be installed onto a computer system or processed by an imaging tool by using install scripts that correspond to the uninstall scripts. The install scripts can be determined from information from the uninstall scripts in combination with log information related to the OS during an original installation. When a software program is installed under an OS, the OS maintains a log of actions taken during the installation process. For example, the log includes information on changes to the OS software. Such changes can include,

for example, newly shared DLLs reference counts, removed tags, decremented reference counts, etc. Such information can be used to configure the generated install scripts. The install scripts are ascertainable because the install and uninstall procedures are standardized. Accordingly, existing information in the image can be used in a reverse engineering process to create install scripts from the uninstall scripts. The install and uninstall scripts can be stored in a location specified by the user or in a default location such as with the files needed by related software programs."

As seen from the above, the invention as recited in the independent claims as well as the claims dependent thereon are not taught or suggested by the DERIVE reference because the DERIVE reference is directed to reverse engineering or copying of instructions to allow the instructions to be transferred from one instruction set to another instruction. As stated above, the recited invention provides at least a portion of an image which is clearly different from an instruction set. Furthermore, in the recited invention at least one module is created utilizing either uninstall information or install information from at least one portion of an image.

DERIVE neither teaches nor suggests an equivalent process. Accordingly, this cooperation of elements are not taught, suggested or contemplated by the DERIVE reference.

Accordingly, claims 2-12, 14-18, 20-30, 32-36 and claims 40-54 are allowable since they depend from allowable base claims as well as for the above-stated reasons.

#### Claim Rejections - 35 USC § 103(a)

The Examiner states,

Claims 5, 7, 14-16, 18, 23, 25, 32-34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over DERIVE in view of Modular Type-Based Reverse Engineering of Parameterized Types in Java Code, Dominic Duggan, ACM, 1999, pages 97-113.

Since, it is not clear if the independent the Applicant is claiming is from the input of the output of reverse engineering the Examiner has elected to reject the following claims under 35 U.S.C. 103(a).

**Motivation to Combine DERIVE and JAVA** 

DERIVE teaches the emitting of C code (DERIVE, page 22). C code is not universally known to be platform independent. It is JAVA who teaches a well known platform independent language. Therefore, it would have been obvious to one of ordinary skill in the art to combine DERIVE and JAVA, because reverse engineering for a language like JAVA which is platform independent by the implementation of a virtual machine, would make a reverse engineering tool more flexible.

Applicant submits that the arguments hereinabove with respect to the DERIVE reference apply with equal force to this rejection since these claims depend from allowable base claims.

The JAVA reference describes a language independent platform but the combination of JAVA reference and the DERIVE reference provides for the reverse engineering of instructions utilizing a language independent platform. For the above-stated reasons, this is clearly different from the invention as recited in the above-identified claims.

Accordingly, claims 5, 7, 14-16, 18, 23, 25, 32-34 and 36 are allowable over the cited references either singly or in combination for the above-cited reasons in the above-identified claims.

### New Claims

Applicants have added a new independent system claim 39 that has similar limitations to that in method and computer readable medium claims 1 and 19.

Accordingly, claim 39 is also allowable over the cited reference for the above-mentioned reasons. Furthermore, claims 40-54 are also allowable since they depend from an allowable base claim as well as for the above-stated reasons.

Independent computer readable medium claim 38 has been amended and new independent system 55 has been added to further define the scope and novelty of the present invention. Specifically both claims specifically recites "creating the at least one module from the at least one portion of the image <u>utilizing uninstall code"</u>. Applicants respectfully submit

therefore that these claims are allowable for the same reasons as stated for independent claims 1 and 19.

New dependent claims 56-60 are added to further define the scope and novelty of the present invention.

# Conclusion

For the above-identified reasons, Applicant respectfully requests reconsideration and allowance of claims 1-7, 9-12, 14-25, 27-30, 32-36, and 38-60 as now presented.

Applicant's attorney believes that this application is in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicant's attorney at the telephone number indicated below.

Respectfully submitted,
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